AMENDMENTS TO THE CLAIMS:

The following listing of claims supersedes all prior versions and listings of claims in this application:

1-18. (Cancelled)

19. (New) A method of transmitting a recording comprising a sequence of data packets from a server comprising a data store, a control unit and a transmitter over a network to a receiver comprising a receiver buffer, the method comprising:

the server commencing transmission over the network of the recording to the receiver;

the receiver holding received data in said receiver buffer; and

at the server, the control unit:

analyzing the whole of the recording to determine where a point in the transmission of the recording is reached at which, if the receiver were to commence playing data already transmitted and held in said receiver buffer, said receiver buffer would not underflow;

generating a message to be sent to the receiver by said transmitter to instruct the receiver to commence playing said received data when the point is reached; and

continuing transmission to the receiver.

20. (New) A method of transmitting a recording comprising a sequence of data packets from a server comprising a data store, a control unit and a transmitter over a network to a receiver comprising a receiver buffer, the method comprising:

the server commencing transmission of the recording over the network to the receiver;

the receiver holding received data in said receiver buffer; and

at the server, the control unit:

analyzing the whole of the recording to determine where a point in the transmission of the recording is reached at which, if the receiver were to commence decoding data already transmitted and held in said receiver buffer, said receiver buffer would not underflow;

generating a control message to be sent to the receiver by said transmitter to instruct the receiver to commence decoding said received data when the point is reached; and

continuing transmission to the receiver,

wherein, said point is determined by analyzing the whole of the recording to identify a first section at the beginning of the recording which meets the condition that it covers a playing time interval greater than or equal to the maximum of the extent to

which the transmission time of the respective following section of the recording exceeds its playing time interval for a following section of any length; and

the control message causes the receiver to commencing playing of received data only after said first section has been received.

21. (New) A method according to claim 20, wherein after transmission of said first section, said start message is transmitted to instruct the receiver to commence playing.

22. (New) A method according to claim 20, comprising:

transmitting to the receiver an instruction specifying the first section and wherein the receiver commences playing when said receiver recognizes that the first section is in said receiver buffer.

23. (New) A method according to claim 20, in which:

at the server, said analyzing comprises computing said maximum timing error values for different sections of the sequence, and

at the receiver, the values are compared with the buffer contents to recognize when said first section is in the buffer.

24. (New) A method according to claim 20, comprising:

withholding transmission of an initial part of the recording until the remainder of said first section has been transmitted; and

transmitting said initial part;

wherein the receiver commences playing only when said initial part is received.

25. (New) A method according to claim 20, including:

performing the analysis in advance of said transmission of said recording to the receiver; and

marking the identified section in the recording prior to its transmission.

26. (New) A method according to claim 20, wherein said analyzing includes:

computing, in advance, timing error values corresponding to a plurality of transmitting data rates and storing them; and

subsequently estimating therefrom an error value corresponding to an actual transmitting data rate.

27. (New) A method according to claim 19, in which the analyzing comprises:

testing a timing error parameter evaluated for successive portions of the recording,

wherein the timing error parameter is first calculated in respect of a first or early portion of the recording and the timing error parameter for subsequent portions is obtained by updating the parameter obtained for the preceding portion .

28. (New) A method according to claim 19, in which the recording is a video recording.

29. (New) A method according to claim 19, in which the recording is an audio recording.

30. (New) A method as claimed in claim 19, wherein:

the recording is transmitted in a network from the server to the receiver at a fluctuating transmitting data rate which is not known when the whole of the recording is analyzed to identify a first section at the beginning of the recording which meets the condition that it covers a playing time interval greater than or equal to the maximum of the extent to which the transmission time of the respective following section exceeds its playing time interval for a following data section of any length; and

said control message causes the receiver to commence playing of received data only after said first section has been received.

31. (New) A method as claimed in claim 19, wherein the recording is transmitted over a network and is to be played in real time by the receiver.

32. (New) A transmission system for transmitting a recording comprising a sequence of data packets from a server comprising a data store, a control unit and a transmitter over a network to a receiver comprising a receiver buffer, wherein:

the server is arranged to commence transmission of the recording to the receiver over the network;

the receiver is arranged to hold received data in said receiver buffer;

the control unit of the server is arranged to analyze the whole of the recording to determine where a point in the transmission of the recording is reached at which, if the receiver were to commence decoding data already transmitted and held in said receiver buffer, said receiver buffer would not underflow and to generate a control message to be sent to the receiver by said transmitter to instruct the receiver to commence decoding said received data when the point is reached; and

the receiver is arranged to commence playing received data only after said control message is received.